

GAO

**Fact Sheet for Congressional
Requesters**

September 1990

**JUSTICE ADP
PROCUREMENT**

**Contracting and
Market Share
Information**





United States
General Accounting Office
Washington, D.C. 20548

Information Management and
Technology Division

B-510571

September 28, 1990

The Honorable John Conyers, Jr.
Chairman, Committee on Government
Operations
House of Representatives

The Honorable Frank Horton
Ranking Minority Member, Committee
on Government Operations
House of Representatives

This report responds to your February 1989 requests for a comprehensive review of federal agencies' compatible computer procurements.¹ In your initial requests and in subsequent discussions with your offices, we were asked to answer several specific questions about agencies' procurements of mainframe computers and mainframe peripheral equipment. Your questions focused on identifying the extent to which agencies' procurements of mainframe computers and mainframe peripherals required compatibility with International Business Machines (IBM) or any other computer manufacturer. You were also interested in knowing details such as the identification of manufacturers whose equipment was acquired by each agency and the procurement methods used to obtain equipment.

This report focuses on the Department of Justice. The information we obtained from Justice shows that during the 3-1/2 fiscal years ending in March 1989, 100 percent of Justice's 41 procurements for mainframes and mainframe peripherals required IBM compatibility.² IBM equipment was supplied in 17 of the 41 procurements (42 percent). Overall, IBM equipment was supplied for more Justice mainframe and mainframe peripheral equipment procurements than any other manufacturer's equipment. When we used dollars for comparison—as opposed to the number of procurements—we found that Justice obligated more dollars

¹A compatible procurement requires hardware or software that functions like specified or existing hardware or software, with little or no modification. Competition in such procurements may occur between manufacturers and marketers—such as system developers and system integrators—to supply equipment that meets the compatible requirements. Since there is the potential for competition between manufacturers and marketers, a compatible procurement does not necessarily result in the award of a sole source contract.

²Because several companies manufacture and market IBM-compatible equipment, competition in IBM-compatible procurements may occur among a variety of manufacturers and marketers.

to procurements involving IBM equipment than to any other manufacturer's equipment. Of its \$85.3 million total obligations, Justice obligated \$38.1 million for IBM versus \$47.2 million for all others.


As requested in discussions with your offices, we also obtained information from Justice on the procurement methods it used. The detailed questions you asked and our answers are summarized in appendix I. Appendix II contains tables with detailed statistics that are the basis for our answers to your questions. We have also included separate tables in appendix III of detailed statistics on the Federal Bureau of Investigation's (FBI) procurements. Further, we requested separate data from Justice on the Immigration and Naturalization Service's procurements. However, Justice reported that the Immigration and Naturalization Service did not conduct separate mainframe or peripheral procurements during the period covered by our review.

We are reporting information for the 3-1/2 fiscal years from October 1, 1985, through March 31, 1989. All the information is based on Justice's response to a questionnaire we devised and distributed to 35 agencies. We did not independently validate the information, nor did we evaluate any documentation related to individual Justice procurements. However, we checked Justice's information for consistency with the instructions for our questionnaire and made appropriate revisions. At your request, we did not solicit or obtain comments from Justice on this report. Appendix IV contains additional details on the objective, scope, and methodology of our work.

In addition to this report on Justice, we previously reported similar information on the Departments of Agriculture, Commerce, Defense, and Health and Human Services. We also reported on the Air Force, Army, Navy, and the National Aeronautics and Space Administration.

As arranged with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days after the date of this letter. We will then send copies to Justice and will also make copies available to others upon request.

This information was compiled under the direction of Jack L. Brock, Jr., Director, Government Information and Financial Management, who can be contacted at (202) 275-3195, should you require additional information. Other major contributors to this report are listed in appendix V.


f Ralph V. Carlone
Assistant Comptroller General

Contents

Letter	1
Appendix I Questions and Answers About Justice Procurements	6
Appendix II Detailed Statistics on Justice Procurements	12
Appendix III Detailed Statistics on FBI Procurements	13
Appendix IV Objective, Scope, and Methodology	14
Appendix V Major Contributors to This Report	17
Related GAO Products	20
Tables	
Table II.1: Justice Mainframe and Mainframe Peripheral Procurements	12
Table II.2: Justice IBM-Compatible Procurements According to Manufacturer of Equipment	12
Table II.3: Justice IBM-Compatible Procurements According to Procurement Method	12
Table III.1: FBI Mainframe and Mainframe Peripheral Procurements	13
Table III.2: FBI IBM-Compatible Procurements According to Manufacturer of Equipment	13

Table III.3: FBI IBM-Compatible Procurements According to Procurement Method	13
--	----

Figures

Figure I.1: Number of Justice Mainframe and Mainframe Peripheral Procurements	7
Figure I.2: Dollars for Justice Mainframe and Mainframe Peripheral Procurements	7
Figure I.3: Number of Justice IBM-Compatible Procurements According to Manufacturer of Equipment	9
Figure I.4: Dollars for Justice IBM-Compatible Procurements According to Manufacturer of Equipment	9
Figure I.5: Number of Justice IBM-Compatible Procurements According to Procurement Method	11
Figure I.6: Dollars for Justice IBM-Compatible Procurements According to Procurement Method	11

Abbreviations

ADP	automated data processing
FBI	Federal Bureau of Investigation
GAO	General Accounting Office
GSA	General Services Administration
IBM	International Business Machines
IMTEC	Information Management and Technology Division

Questions and Answers About Justice Procurements

What are the numbers and dollar amounts of Justice's mainframe and mainframe peripheral procurements requiring compatibility and is there any trend toward the increased use of compatible procurements?

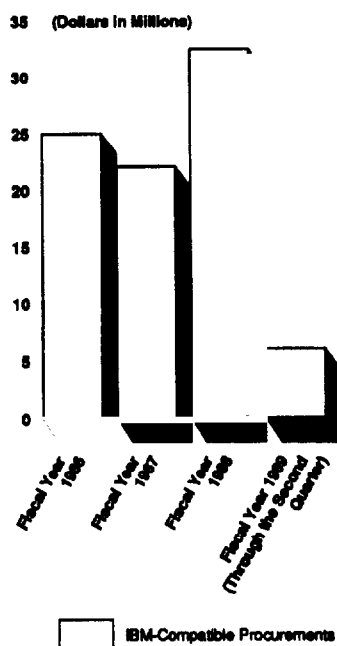
Justice had a total of 41 procurements and obligated a total of \$85.3 million for mainframe computers and mainframe peripherals during the 3-1/2 fiscal years ending in March 1989. According to Justice statistics, IBM-compatible procurements comprised 100 percent of Justice's 41 total procurements and represented all of the \$85.3 million obligated. Because Justice's statistics indicate 100 percent IBM-compatible procurements in each of the 3-1/2 fiscal years, there was no trend toward increased use of compatible procurements.

Appendix I
Questions and Answers About
Justice Procurements

Figure I.1: Number of Justice Mainframe
and Mainframe Peripheral Procurements



Figure I.2: Dollars for Justice Mainframe
and Mainframe Peripheral Procurements



What equipment manufacturers are involved in Justice's IBM-compatible mainframe and mainframe peripheral procurements?

Justice obtained IBM equipment more frequently than any other manufacturer in fiscal years 1986 through 1989 (through the second quarter). Of the 41 IBM-compatible procurements, Justice obtained IBM equipment in 17 procurements representing \$38.1 million in obligated dollars. Amdahl equipment was obtained in 7 procurements representing \$25.6 million in dollars obligated while National Advanced Systems equipment was used in 9 procurements totaling \$19.4 million. Storage Technology Corporation and others were among those manufacturers involved in the remainder of Justice's IBM-compatible procurements.

Appendix I
Questions and Answers About
Justice Procurements

Figure I.3: Number of Justice IBM-Compatible Procurements According to Manufacturer of Equipment

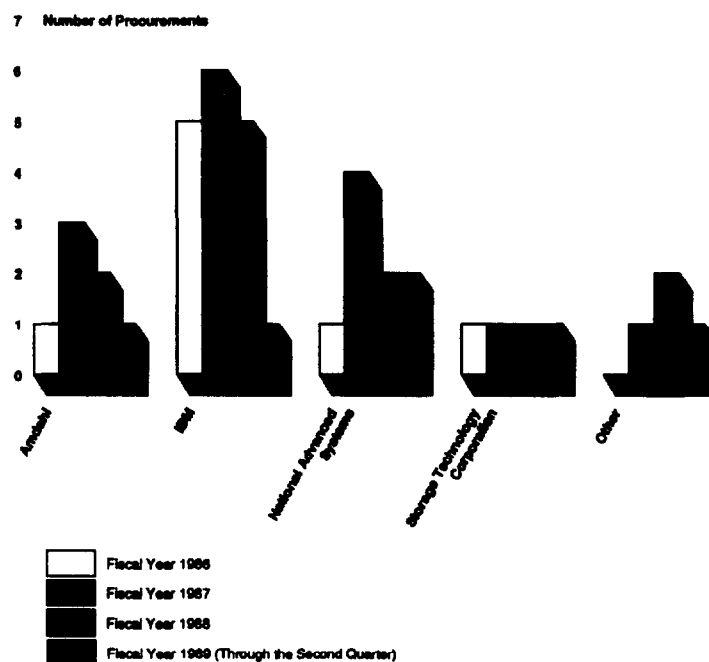
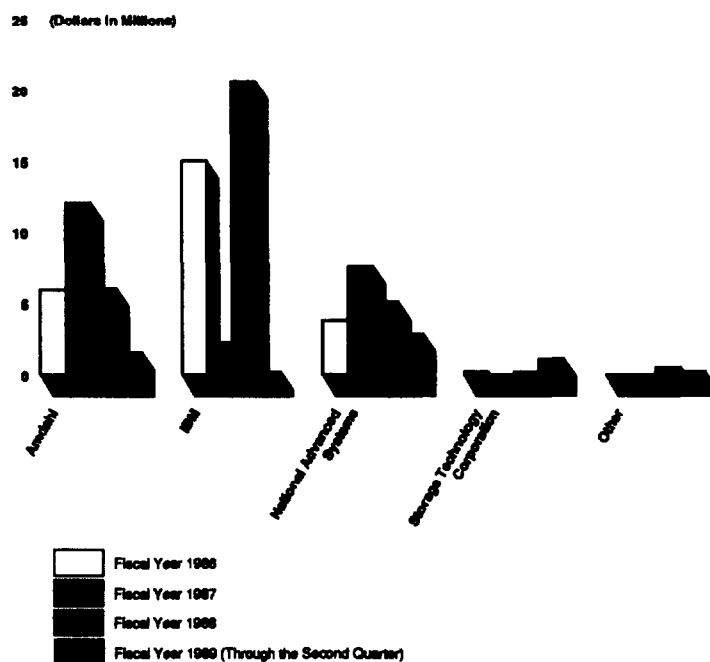


Figure I.4: Dollars for Justice IBM-Compatible Procurements According to Manufacturer of Equipment



What procurement methods were used to obtain IBM-compatible mainframe computers and mainframe peripheral equipment? And, did Justice frequently use new contracts with 8(a) contractors to obtain this equipment?

Using the number of procurements as a measure, Justice used two methods most frequently—modifications to existing contracts and General Services Administration (GSA) schedule purchases—to obtain equipment for its IBM-compatible requirements. Justice used these methods 16 and 13 times respectively for its 41 procurements (71 percent). Using dollars as a measure, Justice used new contracts with a developer or integrator and modifications to existing contracts most frequently. Through these methods, Justice obligated \$35.3 million and \$32.2 million respectively (79 percent of the total \$85.3 million Justice obligations). The method—new contracts with 8(a) firms—was not used by Justice in any of its 41 compatible procurements.

Appendix I
Questions and Answers About
Justice Procurements

Figure I.5: Number of Justice IBM-Compatible Procurements According to Procurement Method

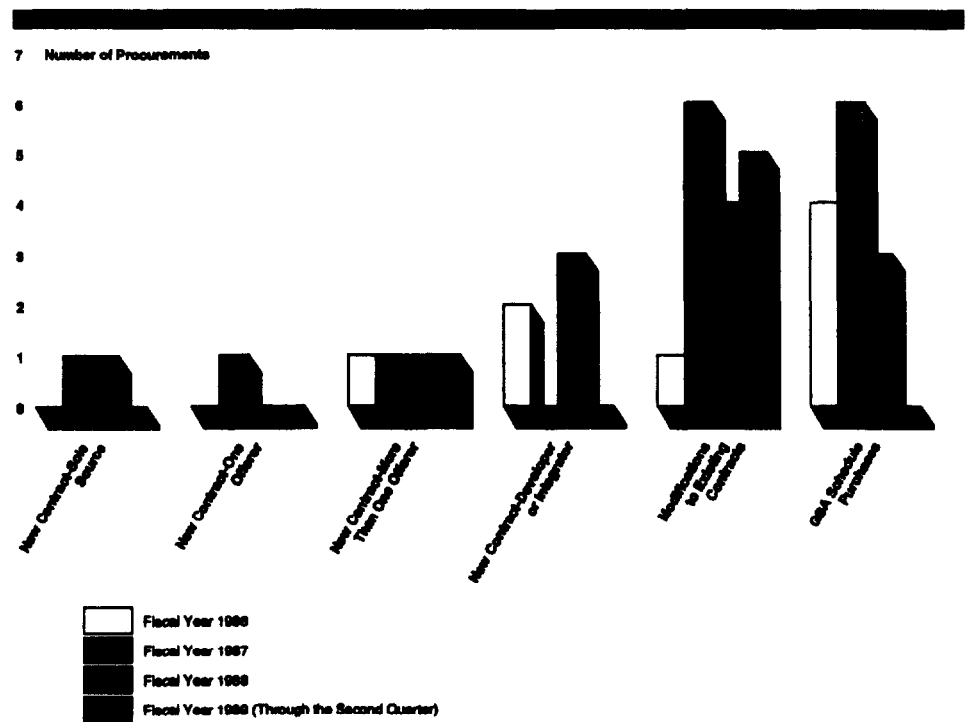
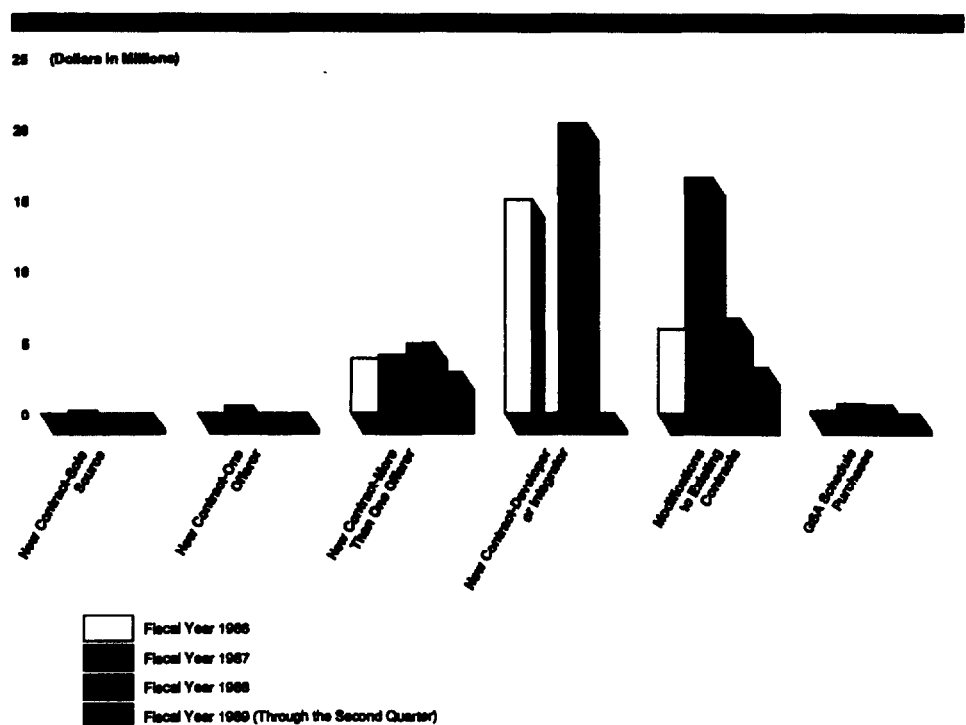


Figure I.6: Dollars for Justice IBM-Compatible Procurements According to Procurement Method



Detailed Statistics on Justice Procurements

Table II.1: Justice Mainframe and Mainframe Peripheral Procurements

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Compatible	8	\$24.9	15	\$22.0	12	\$32.4	6	\$6.0	41	\$85.3
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	8	\$24.9	15	\$22.0	12	\$32.4	6	\$6.0	41	\$85.3
Compatible Percent of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

^aFiscal year 1989 through the second quarter.
Table II.2: Justice IBM-Compatible Procurements According to Manufacturer of Equipment

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	1	\$5.9	3	\$12.1	2	\$6.0	1	\$1.6	7	\$25.6
IBM	5	15.0	6	2.3	5	20.6	1	0.2	17	38.1
National Advanced Systems	1	3.8	4	7.6	2	5.1	2	2.9	9	19.4
Storage Technology Corporation	1	0.2	1	b	1	0.2	1	1.1	4	1.5
Other	0	0.0	1	b	2	0.5	1	0.2	4	0.7
Total	8	\$24.9	15	\$22.0	12	\$32.4	6	\$6.0	41	\$85.3

^aFiscal year 1989 through the second quarter.^bLess than \$50,000.
Table II.3: Justice IBM-Compatible Procurements According to Procurement Method

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	0	\$0.0	1	\$0.2	1	b	0	\$0.0	2	\$0.2
New Contract—One Offeror	0	0.0	1	0.5	0	\$0.0	0	0.0	1	0.5
New Contract—More Than One Offeror	1	3.8	1	4.1	1	4.9	1	2.8	4	15.6
New Contract—Developer or Integrator	2	15.0	0	0.0	3	20.3	0	0.0	5	35.3
Modifications to Existing Contracts	1	5.9	6	16.5	4	6.6	5	3.2	16	32.2
GSA Schedule Purchases	4	0.2	6	0.7	3	0.6	0	0.0	13	1.5
Total	8	\$24.9	15	\$22.0	12	\$32.4	6	\$6.0	41	\$85.3

^aFiscal year 1989 through the second quarter.^bLess than \$50,000.

Detailed Statistics on FBI Procurements

Table III.1: FBI Mainframe and Mainframe Peripheral Procurements

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Compatible	4	\$13.9	10	\$10.7	9	\$21.2	4	\$1.6	27	\$47.4
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	4	\$13.9	10	\$10.7	9	\$21.2	4	\$1.6	27	\$47.4
Compatible Percent of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

^aFiscal year 1989 through the second quarter.
Table III.2: FBI IBM-Compatible Procurements According to Manufacturer of Equipment

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	0	\$0.0	2	\$5.0	1	b	0	\$0.0	3	\$5.0
IBM	3	10.1	5	2.2	5	\$20.6	1	0.2	14	33.1
National Advanced Systems	1	3.8	3	3.5	1	0.2	1	0.1	6	7.6
Storage Technology Corporation	0	0.0	0	0.0	1	0.2	1	1.1	2	1.3
Other	0	0.0	0	0.0	1	0.2	1	0.2	2	0.4
Total	4	\$13.9	10	\$10.7	9	\$21.2	4	\$1.6	27	\$47.4

^aFiscal year 1989 through the second quarter.^bLess than \$50,000.
Table III.3: FBI IBM-Compatible Procurements According to Procurement Method

Dollars in millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 ^a		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	0	\$0.0	1	\$0.2	1	b	0	\$0.0	2	\$0.2
New Contract—One Offeror	0	0.0	1	0.5	0	\$0.0	0	0.0	1	0.5
New Contract—More Than One Offeror	1	3.8	0	0.0	0	0.0	0	0.0	1	3.8
New Contract—Developer or Integrator	1	10.1	0	0.0	3	20.3	0	0.0	4	30.4
Modifications to Existing Contracts	0	0.0	5	9.4	3	0.6	4	1.6	12	11.6
GSA Schedule Purchases	2	b	3	0.6	2	0.3	0	0.0	7	0.9
Total	4	\$13.9	10	\$10.7	9	\$21.2	4	\$1.6	27	\$47.4

^aFiscal year 1989 through the second quarter.^bLess than \$50,000.

Objective, Scope, and Methodology

In February 1989 we were requested by the Chairman and the Ranking Minority Member, House Committee on Government Operations, to perform a comprehensive review of the government's use of IBM-compatible automated data processing procurements. In response to the requests and in discussions with the Chairman's and Ranking Minority Member's offices, we agreed that procurements of mainframes and mainframe peripherals would be included in our review, with emphasis on compatible procurements. Our review covered procurements during the 3-1/2 fiscal years ending in March 1989, at 35 federal agencies.

Our primary objective was to obtain and analyze information on specific aspects of each agency's ADP-related procurements. This report focuses on the Department of Justice and includes the number and aggregate dollar value of Justice's mainframe-related contracts, distribution of procurements among equipment manufacturers, and various procurement methods used by Justice to obtain mainframe-related equipment. Further, we included separate tables of detailed statistics on FBI's procurements in appendix III.

We used the following mutually exclusive procurement methods to group Justice's procurements. The first three methods represent specific types of new contracts with mainframe and peripheral equipment manufacturers. These consist of sole source new contracts, new contracts that resulted from competitive procedures where only one offeror remained in the procurement at the time the awardee was selected, and new contracts that resulted from competitive procedures where the awardee was selected from among multiple competitors. We also included a category for new contracts with system developers and integrators. Additionally, we obtained and analyzed data on Justice's modifications to existing contracts and its use of GSA's multiple award schedule contracts.

To accomplish our objective and facilitate Justice's information gathering, we designed a questionnaire which, when properly completed by Justice, provided us with the necessary information. Our questionnaire included several charts and provided detailed instructions, with definitions and examples, to help Justice identify and report the relevant information. Our questionnaire instructions cited pertinent federal regulations to ensure consistency in understanding of the terms used and to identify key definitions.

In preparing instructions for our questionnaire, we recognized the need to clearly and consistently identify mainframe computers, as opposed to

superminicomputers and supercomputers. Because technology changes, criteria such as storage capacity, processing speed, physical size, cooling requirements, and cost do not provide an adequate basis for clear and consistent identification of mainframes. Therefore, after consulting with computer vendors, General Services Administration, other federal agency officials, and Datapro,³ we considered vendor marketing strategy—in addition to computer architecture and performance—as the basis for classifying particular computers as superminicomputers, mainframes, or supercomputers. Like Datapro, we classified as mainframes some smaller and less expensive models if they belong to a product line, or family, of mainframes sharing a common architecture or operating system. However, models with similar performance characteristics that do not belong to a mainframe family and are manufactured by companies that are not traditionally recognized as mainframe manufacturers were not classified as mainframes. We provided a list of mainframe manufacturers and models in the instructions for our questionnaire as examples of computers that agencies should include in completing the questionnaire.

We obtained comments on preliminary copies of our questionnaire from information resources management officials at the Departments of Agriculture and Transportation, to aid in ensuring the questionnaire's clarity. After modifying the questionnaire based on comments received, we asked the senior information resources management officials at Justice and 34 other federal agencies to complete the questionnaire.

Our questionnaire was furnished to Justice in mid-April 1989. Upon receiving Justice's (excluding FBI) response in June 1989 and FBI's response in September 1989, the information was reviewed to determine if the instructions were followed correctly and if the information was clear and consistent. Although we did not independently validate the information supplied in the Justice response, our questionnaire contained several internal checks to determine if inconsistencies were present. In some situations we modified the data on the basis of discussions with agency officials. Our work did not include solicitation or evaluation of documents related to Justice's individual procurements. The figures and tables in appendixes I, II and III were developed from our analysis.

We did not solicit or obtain comments from Justice about this report, however, we discussed our scope and methodology with Justice officials

³Datapro is a trade publication that provides detailed information on computers, peripheral equipment and software.

Appendix IV
Objective, Scope, and Methodology

in August 1990. Our review was conducted from February 1989 through August 1990 and was performed in accordance with generally accepted government auditing standards.

Major Contributors to This Report

Information
Management and
Technology Division,
Washington, D.C.

Mark E. Heatwole, Assistant Director
Mark T. Bird, Senior Evaluator
Paul J. Bollea, Senior Evaluator

Related GAO Products

US ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-87FS, Aug. 30, 1990).

Commerce ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-77FS, July 31, 1990).

Defense ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-62FS, June 27, 1990).

Energy ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-50FS, June 8, 1990).

NSA ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-39FS, Apr. 20, 1990).

State ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-25FS, Apr. 9, 1990).

Army ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-90-28FS, Mar. 1, 1990).

Navy ADP Procurement: Contracting and Market Share Information
(GAO/IMTEC-89-66FS, Sept. 15, 1989).

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

<p>First-Class Mail Postage & Fees Paid GAO Permit No. G100</p>
--